



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/027,345	12/20/2001	Steve Y. Chang	884.690US1	9612

21186 7590 07/26/2005

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.
P.O. BOX 2938
MINNEAPOLIS, MN 55402-0938

EXAMINER

PHAN, THANH S

ART UNIT PAPER NUMBER

2841

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/027,345

Applicant(s)

CHANG ET AL.

Examiner

Thanh S. Phan

Art Unit

2841

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-56 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-56 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: Non pat. lit. ref.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 5, 8, 10, 14, 15, 18, 20-24, 27, 31, 33, 37, 38, 43, 46, 47, 52, 55 and 56 are rejected under 35 U.S.C. 102(b) as being anticipated by Collins et al. [6,018,125].

Collins et al. disclose an electronic component [figure 2] mounted within a chassis [10] (a computer which having at least one CPU chip not explicitly labeled) including a polymer electromagnetic interference (EMI) shield [14] comprising: a waveguide body including an array of circular waveguide cells [18] each having a contiguous inner surface; and an absorber layer [column 2, lines 60-61] covering at least a portion of each contiguous inner surfaces and capable of absorbing electromagnetic radiation over a select frequency range [column 3, line 29-34].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9, 12, 13, 16, 19, 34, 39-42, 44-45, 48-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Collins et al.

Regarding claims 9, 12, 13, 16, 19, 39-42, 44, 45, 48-50, Collins et al. disclose the claimed invention except for the specific material used. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to a specific material for manufacturing a product, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of engineering choice. In re Leshin, 125 USPQ 416.

Regarding claim 34, Collins et al. disclose the claimed invention except for the specific dimension of the apertures. It would have been obvious to one of ordinary skill in the art at the time of the invention was made use a specified dimension, since such a modification would have been involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955).

Claims 2, 4, 15, 35, 12 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Collins et al. in view of Mitchell [6,426,459].

Regarding claims 2 and 12, Collins et al. disclose the instant claimed invention except for: each waveguide cells having a polygonal crosssection, and the shield being formed of a metallic material.

Mitchell discloses a waveguide shield [10] formed of metal having polygonal shape cells.

It would have been obvious to a person having ordinary skill in the art at the time invention was made to use the shield design of Mitchell for the shield design of Collins et al. for the purpose of improving ventilation.

Regarding claims 4, 15, 35 and 53-54, Collins et al. as modified by Mitchell does not disclose the specific claimed shape. However, it would have been obvious to modify Collins et al. as modified by Mitchell by having a specific shape cell with different type of configurations since applicant have presented no explanation that these particular configurations of the cells are significant or are anything more than one of numerous configurations a person of ordinary skill in the art would find obvious for the purpose of providing a cross section between the two walls. A change in shape is generally recognizing as being within the level of ordinary skill in the art. In re Dailey, 149 USPQ 47 (CCPA 19760).

Regarding claims 7, 29, 30, Collins et al. as modified by Mitchell disclose that the resistivity of the absorber layer is **about** the claimed range.

Claims 6, 17, 25, 32, 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Collins et al. as modified by Mitchell in view of Clement et al. [US 6,809,254].

Collins et al. as modified by Mitchell disclose the claimed invention except for the thickness of the absorbing layer is between .025 mm and .25 mm

Clement et al. disclose an electronics enclosure having an interior shielding comprising a shielding layer [14] having a thickness between .025 mm and .25 mm

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to use an absorbing layer having a thickness between .025 mm and .25 mm as teach by Clement et al. with Collins et al. as modified by Mitchell to effectively providing EMI shielding.

Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Collins et al. in view of Pierce [US 5,431,974].

Regarding claim 26, Collins et al. disclose the claimed invention except for using screws to attach the shielding to the chassis would have been obvious in order to securely mounted the shield thereto.

Pierce teaches that it is known to use screws, bolts and the like with an electromagnetic radiation shielding filter assembly [column 3, line 20-22].

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to use the teachings of Pierce with Collins et al. to facilitate the attachment of the shielding assembly to a surface.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Collins et al. in view of Narang et al. [5,976,666].

Collins et al. disclose the instant claimed invention except for: the absorber layer including an epoxy resin filled with particles having a high magnetic loss over the select frequency range.

Narang et al. disclose an absorber layer for an EMI shield including an epoxy resin filled with particles having a high magnetic loss over the select frequency range [abstract].

It would have been obvious to a person having ordinary skill in the art at the time invention was made to use magnetic particles in the absorber layer of Collins et al. for the purpose of controlling frequencies.

Response to Arguments

Applicant's arguments filed 05/19/05 have been fully considered but they are not persuasive. Applicant argues fails Collins [US 6,018,125] fails to read on the claimed invention. The examiner disagrees:

[1] Regarding the arguments on page 10 of the REMARKS, as acknowledge by the applicant, Collins et al. disclose a conductive coating layer. The examiner does not understand why this layer is not an absorber layer since conductive material absorbs EMI. Therefore this is an absorber layer. Applicant is invited to see the attached copies of the text regarding these teachings from the Serway & Faughn, College Physics, Fourth edition.

[2] Regarding the arguments from the last para. on page 10 through the first para. on page 11. See [1].

[3] The examiner does not understood the following arguments on page 11, third para. "...that the office Action has not produced extrinsic evidence to show that "(nickel over) conducts, reflects and absorbs to some degree all electromagnetic radiation" or that "any conductor absorbs to some degree," or that these elements are necessarily present in Collins et al. " By definition of conductive material. Electronic and magnetic radiation conductive material absorbs EMI. Collins et al. does not have to disclose this. It is a law of nature.

[4] Regarding the following argument on page 11, ‘...in the Office Action is within the personal knowledge of the Examiner. Thus, the Examiner is taking official notice with respect to these elements as recited in the claims.’ The examiner would like to clarify that he did not take official notice regarding claims 1, 3, 5, 8, 10, 14, 15, 18, 20-24, 27, 31, 33, 43, 46, 47, 52, 55 and 56. Official notice is taking for claims 7, 29, 30, 37 and 38, wherein the claimed limitations are regarding the range of resistivity and/or frequency of the absorbing layer. Furthermore, it is not true that the “correlation stated in the Office action” are “personal knowledge of the Examiner” but rather a law of nature. If applicant wished to verify this, any physics or electrical text can be referenced by applicant.

[5] Regarding the following argument on page 12, “Applicant respectfully disagrees and objects to the taking of official notice in a single reference obviousness rejection...” has not rebutted the rejection but for stating that there is no reference shown. This is not persuasive and the office have provide a reference.

[6] Regarding the argument on page 13, first para. The examiner already explained as [1] above.

[7] Regarding the arguments regarding claims 2, 4, 7, 12, 15, 29-30, 35, 37, 38, 53 and 54 on page 13-14. Arguments are not persuasive, Mitchell & Collins et al. both show that various shapes (circular, honeycomb) are known. And since this shape is not significant and is known, the criteria of obviousness of one ordinary skill in the art are meet.

[8] Regarding the arguments on page 15, second para. The examiner already explained as [1] above.

[9] Regarding the arguments on page 16, "...fails to state a specific reason why it would be obvious to combine the references, and is mere speculation using impermissible hindsight in order to reconstruct the claimed invention." The office does not understand how, or based on what is it impermissible. The motivation clearly stated and the teachings are in the references.

[10] Regarding the arguments on page 16 regarding claims regarding the thickness of the absorber layer. As stated in [1] the absorber layer is disclosed. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

[11] Regarding the arguments on page 17. The argument is now moot in view of the new rejection.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

Art Unit: 2841


shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh S. Phan whose telephone number is 571-272-2109. The examiner can normally be reached on M-F 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamand Cuneo can be reached on 571-272-1957. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

tsp



KAMAND CUNEO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800